Please amend the claims to read as follows:

1. (original) A method of analyzing an organic medium potentially including defects within a noisy structure, such that said medium is excited by ultrasonic signals emitted by a set of N transducers and focused at a given depth at M distinct successive excitations in order to obtain an image of said depth after reception of the responses from the medium, such that it also includes the steps of:

- constructing a rectangular response matrix of dimension N*M, a coefficient K_{nm} of which represents the response of the medium received by the transducer n following an excitation m,
- decomposition of said response matrix into singular values,
- use of the singular vectors corresponding to said singular values in order to locate singular zones corresponding to defects in the medium.

2. (currently amended) ~~An analysis~~ method as claimed in claim 1, according to which a response matrix K_{nm} is obtained for a plurality of frequencies.

3. (currently amended) ~~An analysis~~ method as claimed in ~~one of~~ claims 1 ~~or 2~~, according to which M successive excitations are carried out for a plurality of depths of said medium.

4. (original) An ultrasonic medical imaging apparatus intended for analyzing a medium potentially including defects within a noisy structure, said apparatus including a set of transducers for emitting ultrasonic signals focused at a given depth according to M distinct successive excitations, an image formation module in order to obtain an image of said depth after reception of the responses from the medium, such that it includes a module for exploiting said responses in order:

- to construct a rectangular response matrix of dimension N*M, a coefficient K_{nm} of which represents the response of the medium received by the transducer n following an excitation m,
- to decompose said response matrix into singular values,

- to use the singular vectors corresponding to said singular values in order to locate singular zones corresponding to defects in the medium.

5. (original) An apparatus as claimed in claim 4, such that a response matrix K_{nm} is constructed for a plurality of frequencies.

6. (currently amended) An apparatus as claimed in ~~one of~~ claims ~~4 or~~ 5, according to which M successive excitations are carried out for a plurality of depths of said organic medium.

7. (canceled)

8. (new) A method as claimed in claim 2, according to which M successive excitations are carried out for a plurality of depths of said medium.

9. (new) An apparatus as claimed in claim 4, according to which M successive excitations are carried out for a plurality of depths of said organic medium.